

# CMA3 Relay

## 1.COIL DATA

|                               |                  |
|-------------------------------|------------------|
| 1-1.Nominal Voltage           | 6 VDC to 24 VDC  |
| 1-2.Coil Resistance           | Refer to Table 1 |
| 1-3.Operate Voltage           | Refer to Table 1 |
| 1-4.Release Voltage           | Refer to Table 1 |
| 1-5.Nominal Power Consumption | 1.6 W            |



## 2.CONTACT DATA

|  |  |
|--|--|
| 2-1.Contact Arrangement                      | 1 Form C , 1 Form A  |
| 2-2.Contact Material                         | AgSnO <sub>2</sub>   |
| 2-3.Contact Rating                           | 30A 14VDC Resistive ( 1 Form C )<br>40A 14VDC Resistive ( 1 Form A ) |
| 2-4.Max. Switching Voltage                   | 75VDC  |
| 2-5.Max. Switching Current                   | 40A  |
| 2-6.Max. Switching Power                     | 420W ( 1 Form C ) 560W ( 1 Form A )                                  |
| 2-7.Max. Load Current ( 12VDC Load Voltage ) |  |

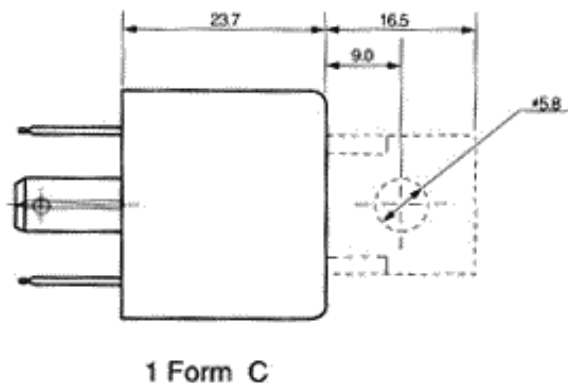
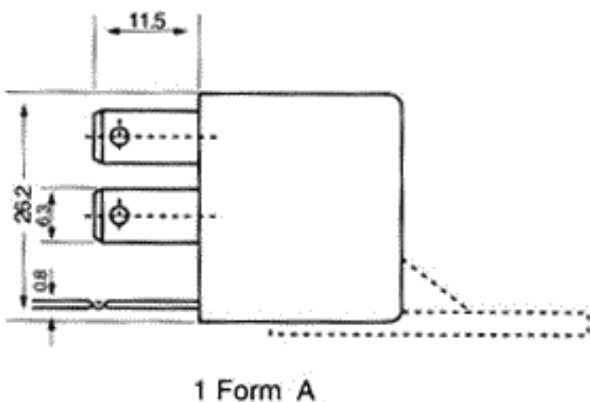
| Load              | Form A | Form C |     |
|-------------------|--------|--------|-----|
|                   |        | NO     | NC  |
| Max.Carry Current | 40A    | 40A    | 30A |
| Max.Make Current  | 100A   | 100A   | 30A |
| Max.Break Current | 40A    | 40A    | 30A |

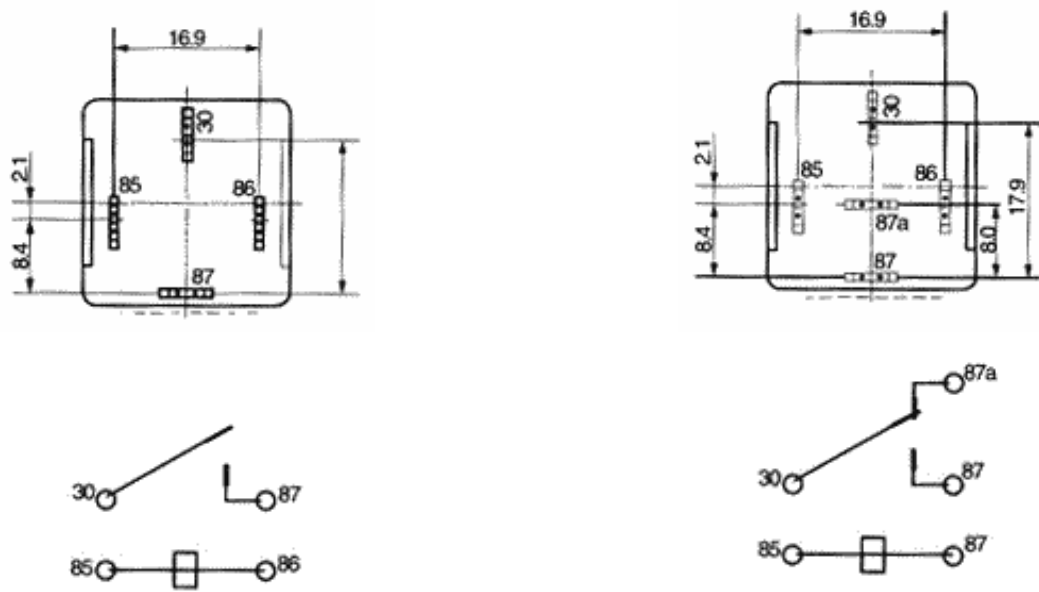
|                                    |            |                                    |
|------------------------------------|------------|------------------------------------|
| 2-8.Contact Resistance ( Initial ) |            | 50 mΩ, at 6VDC 1A                  |
| 2-9.Life Expectancy                | Electrical | 100,000 operations at nominal load |
|                                    | Mechanical | 10,000,000 operations              |

## 3.GENERAL DATA

|                           |   |
|---------------------------|---|
| 3-1.Insulation Resistance | Min.100MΩ, at 500 VDC                   |
| 3-2.Dielectric Strength   | 550VAC , 1min between open contacts     |
|                           | 750VAC , 1min between contacts and coil |
| 3-3.Operate Time          | Max. 10ms                               |
| 3-4.Release Time          | Max. 10ms                               |
| 3-5.Temperature Range     | -40 to +85 ;æ                           |
| 3-6.Shock Resistance      | 10G                                     |
| 3-7.Vibration Resistance  | 10 - 55 Hz , Amplitude 1.5mm            |
| 3-8.Weight                | 30 gr.                                  |

## 4.DIMENSIONS ( in mm )





ii

**5.ORDERING CODE**

|             |             |          |   |
|-------------|-------------|----------|---|
| <b>CMA3</b> | <b>DC6V</b> | <b>A</b> | ii  |
|             |             |          | CONTACT ARRANGEMENT<br>A: 1 FORM A C:1 FORM C |
|             |             |          | NOMINAL VOLTAGE:<br>DC6V , DC12V , DC24V      |
|             |             |          | TYPE  |

**6.COIL DATA CHART**

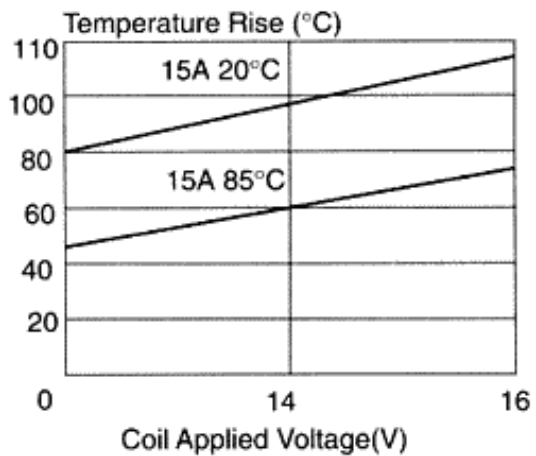
at 20;æ

| ORDERING CODE | COIL NOMINAL VDC | COIL RESISTANCE $\pm 10\%$ | OPERATE VOLTAGE VDC | RELEASE VOLTAGE VDC | COIL NOMINAL mW |
|---------------|------------------|----------------------------|---------------------|---------------------|-----------------|
| CMA3-S DC6V   | 6                | 22                         | 4.2                 | 0.6                 | 1.6             |
| CMA3-S DC12V  | 12               | 85                         | 8.4                 | 1.2                 |                 |
| CMA3-S DC24V  | 24               | 350                        | 16.8                | 2.4                 |                 |

**Table 1**

**7.CMA3 CHARACTERISTIC DATA**

### Temperature Rise



### MAXIMUM SWITCHING POWER

